Cerro Coso College

Course Outline of Record Report

05/07/2020

BSADC222 : Data Analytics for Business

General Information

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Course Code (CB01) (CB01) :	BSADC222
Course Title (CB02) (CB02) :	Data Analytics for Business
Department:	Business Information Technolog
Proposal Start:	Fall 2020
TOP Code (CB03) :	(0506.30) Management Development and Supervision
SAM Code (CB09) (CB09) :	Advanced Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) (CB00) :	CCC000511803
Curriculum Committee Approval Date:	10/04/2019
Board of Trustees Approval Date:	11/14/2019
External Review Approval Date:	11/14/2019
Course Description:	This course teaches students how to use computer applications and critical thinking skills to analyze and solve real-world business problems with analytics. Students integrate the use of word processing, spreadsheet, database management, and other software tools to manage and analyze data in order to solve problems. Emphasis is placed on the use of software tools, analysis, and modeling techniques to manage and manipulate data sources for business decision-making.
Submission Type:	Improvement to Program of Study Mandatory Revision This modification consisted of modifying the course description, changing the course name, changing the advisory for MATH 50 to MATH 55, modifying the course outline, condensing the number of CSLOs, and moving the old CLSOs to SLOs. Additionally, several minor typos and errors were corrected. BSAD 222 was last formally assessed in the Spring of 2012. The results of the assessment had no bearing on this mandatory revision. However, the number of CSLOs were reduced in this revision to help streamline the assessment process.

Faculty Minimum Qualifications

Master Discipline Preferred:	• Business
Alternate Master Discipline Preferred:	• Business • Computer Information Systems (Computer network installation, microcomputer technology, computer applications) • Computer Science • Management
Bachelors or Associates Discipline Preferred:	No value

Additional Bachelors or Associates Discipline:	No value

Course Formerly Known As

Course Formerly Known As

Problem Solving, Decision Making, and Computer Applications in Business

Course Development Options

Basic Skills Status (CB08) (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13) (CB13)

Course is not a special class.

Grade Options

- Pass/No Pass
- Letter Grade methods
- Satisfactory Progress

☐ Allow Students to Gain Credit by Exam/Challenge

Allowed Number of Retakes

0

Course Prior to College Level (CB21)

Not applicable.

Rationale For Credit By Exam/Challenge

No value

Retake Policy Description

Type:|Non-Repeatable Credit

☑ Allow Students To Audit Course

Associated Programs

☑ Course is part of a program (CB24)

Associated Program	Award Type
CC Management-	Certificate of Achievement
Data Analyst I	Certificate of Achievement
Management Associate in Science Degree	A.S. Degree Major
Management Associate in Science Degree	A.S. Degree Major

Transferability & Gen. Ed. Options

Transferability

Transferable to CSU only

Transferability Status

Approved

Units and Hours

Summary

Minimum Credit Units (CB07) (CB07)	3	**Total Course In-Class (Contact) Hours**	54	**Total Student Learning Hours**	162
Maximum Credit Units (CB06) (CB06)	3	**Total Course Out-of-Class Hours**	108	**Faculty Load**	-

Credit / Non-Credit Options

Course Credit Status (CB04) (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22) (CB22)

Credit Course.

Non-Credit Characteristics

No value

Course Classification Code (CB11) (CB11)

Credit Course.

Funding Agency Category (CB23) (CB23)

Not Applicable.

☐ Cooperative Work Experience Education Status (CB10) (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	3	6
Lab Hours	-	-
Activity Hours	-	-

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	54
Lab	-
Activity	-
Total	54
Course Out-Of-Class Hours	
Lecture	108
Lab	-
Activity	-
Total	108

Time Commitment Notes for Students

No value

Faculty Load

Extra Duty: -

Faculty Load: -

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No value	No value	No value	No value

Requisites

Advisory

BSADC100 - Introduction to Business

Students are expected to have an introductory knowledge of general business principles, ethics, organizational structures, and resources. In addition, students are expected to have an introductory knowledge of the functional areas of business and accounting structures and reports.

AND

Advisory

MATHC055 - Intermediate Algebra

Students are expected to solve word problems based on algebraic construction and work with proportions, ratios, exponents, and percentages.
Outcomes

- Consistently perform signed number operations correctly.
- Demonstrate proficiency with operations of algebraic fractions.
- Graph a line and write the equation of a line.
- Graph exponential and logarithmic functions.
- Set up and solve word problems related to the skills above.

AND

Advisory

ITC101 - Introduction to Computer Information Systems

Students are expected to have a working knowledge of application programs and file management. In addition, students should have an introductory knowledge of how computers and information systems are used in business and how computers are programmed.

AND

Advisory

ENGLC101 - Freshman Composition

Students are expected to identify central points, both explicit and implied, of business cases, journal and periodical articles, and college-level textbooks. In addition, students have to outline and summarize complex and technical business readings and interpret difficult and figurative language including academic discourse and business terminology. Students are also expected to write business case reports in an accepted format and to answer the questions in clear and error-free prose based on readings from texts, business journals, and periodicals.

Entrance Skills

Skill	Content Review

No value	No value

Limitations on Enrollment

Limitation	Provide Rationale
No value	No value

Specifications

Methods of Instruction	Methods of Instruction Rationale
Discussion	Topics and scenarios are presented that students must respond to and discuss with other students.
Instruction through examination or quizzing	Students must complete weekly quizzes covering the concepts in each chapter and complete a midterm and final examination.
Lecture	Lectures are provided to the students to clarify and add to the concepts presented in each chapter.
Outside reading	Students must read assigned articles and watch videos related to the concepts presented in each chapter.
Problem Solving	Students use spreadsheet, database management, word processing, and presentation software to solve business related data analysis problems.
Skills Development and Performance	Students learn how to use spreadsheet and database management software to apply to course topics.
Written work	Students write responses to chapter case problems.

Assignments

A. Chapter reading. Reading the assigned chapters from the textbook based on the topics for the week.
B. Weekly case studies and projects. Written case study and project solution responses using word processing, spreadsheet, and database management software based on the topics for the week.

Methods of Evaluation	Methods of Evaluation Rationale
Final Exam	Final Exam demonstrating comprehensive mastery of material presented. Example: In your own words and well-written sentences, describe how to create a Solver model. Please include these key terms in your descriptions: Solver model, objective cell, variable cells, and constraints.
Homework	Weekly case study and applications problem assignments demonstrating mastery of new material. Example: After reading the chapter and doing the Steps to Success assignment, do the Chapter 7 Level 2 Case Problem on pages 488-489 of the text. For questions 5, 6, 7, and 8, type your well-written

	responses to the questions (include the original questions) into a word processing file (MS-Word format!). Save the Word file and the Excel and upload them here. Double-check to make sure that both files are here!!!
Participation	Weekly discussion participation demonstrating understanding of concepts. Example: What experience have you had using Microsoft Office? How have you used the following applications and what is the most complex use of the program that you have experienced: Word Excel PowerPoint Access Please provide some situational examples from your experiences at work/school.
Tests	Chapter quizzes with multiple choice questions. Example: Any Solver solution requires a well-organized spreadsheet that links the variable cells with the ____, and links the known facts about the problem with the objective cell. A. objective cell B. range names C. PivotTable D. summary reports
Distance Education Description: how outcomes are evaluated	Students are to complete all weekly assigned activities designated in the learning management software as detailed above.

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
Monk, E., Brady, J., & Mendelsohn, E.	Problem-Solving cases in Microsoft Access and Excel (16th ed.)	Cengage Learning	2020	978-0357138632
Gross, D., & Nordquist, K.	Succeeding in business with Microsoft Excel 2013: A problem-solving approach (1st ed.).	Cengage Learning	2014	978-1285099149
Butterfield, J.	Problem solving and decision making - Soft skills for a Digital workplace (3rd ed.)	Cengage Learning	2017	9781337119252

Other Instructional Materials

No Value

Materials Fee

No

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Manage and manipulate data from internal and external systems for inclusion in analysis and reporting. Expected SLO Performance: 70.0

ISLOs Core ISLOs	Students who are completing a program will be prepared to engage in responsible citizenship at various levels.

Apply the concepts of individual and group decision-making to business scenarios. Expected SLO Performance: 70.0

Integrate input, processing, and output from different computer applications programs to communicate information for various business decision-making scenarios. Expected SLO Performance: -

Outline

Outline

1. Solving business problems with spreadsheets
a. Applying fundamental Excel skills and tools in problem solving
b. Solving problems with statistical analysis tools
c. Determining effective data display with charts
d. Applying logic in decision-making
e. Using the scenario manager
f. Using the Solver
2. Solving business problems with databases
a. Organizing data for information retrieval
b. Collecting data with well-designed forms
3. Integrating business applications
a. Retrieving data for computation, analysis, and reference
i.Exporting and importing databases
ii. Importing text and csv files
b. Integrating business communications
i. Managing communications with Microsoft Word
ii. Delivering professional presentations with PowerPoint
4. Decision-making
a. Identifying and defining problems
b. Solving problems
c. Thinking critically

d. Group decision-making and problem solving
e. Decision support tools

Delivery Methods

Delivery Method: Please list all that apply -Face to face -Online (purely online no face-to-face contact) -Online with some required face-to-face meetings (“Hybrid”) -Online course with on ground testing -iTV – Interactive video = Face to face course with significant required activities in a distance modality -Other

- Face to face
- Online (purely online no face-to-face contact)
- Online with some required face-to-face meetings (“Hybrid”)
- iTV – Interactive video = Face to face course with significant required activities in a distance modality

Rigor Statement: Assignments and evaluations should be of the same rigor as those used in the on-ground course. If they are not the same as those noted in the COR on the Methods of Evaluation and out-of-class assignments pages, indicate what the differences are and why they are being used. For instance, if labs, field trips, or site visits are required in the face to face section of this course, how will these requirements be met with the same rigor in the Distance Education section? Describe the ways in which instructor-student contact and student-student contact will be facilitated in the distance ed environments.

All assignments in distance education course sections (online, hybrid and iTV) of BSAD C222 are of the same rigor as those in the on-ground section, except that students in purely online sections will submit all of their assignments virtually. Instructor evaluation of student work in distance education course sections is the same as in the on-ground course section, except that evaluation of student work in the online version is presented virtually. Instead of onsite lectures, hybrid and online courses use a variety of methods including, but not limited to videos, and written lecture notes. Students will interact with the instructor and other students via discussion forums or similar methods.

Good practice requires both asynchronous and synchronous contact for effective contact. List the methods expected of all instructors teaching the course. -Learning Management System -Discussion Forums -Message -Other Contact -Chat/Instant Messaging -E-mail -Face-to-face meeting(s) -Newsgroup/Discussion Board -Proctored Exam -Telephone -iTV - Interactive Video -Other

- Discussion Forums
- E-mail

Software and Equipment: What additional software or hardware, if any, is required for this course purely because of its delivery mode? How is technical support to be provided?

No Value

Accessibility: Section 508 of the Rehabilitation Act requires access to the Federal government's electronic and information technology. The law covers all types of electronic and information technology in the Federal sector and is not limited to assistive technologies used by people with disabilities. It applies to all Federal agencies when they develop, procure, maintain, or use such technology. Federal agencies must ensure that this technology is accessible to employees and the public to the extent it does not pose an "undue burden". I am using -iTV—Interactive Video only -Learning management system -Publisher course with learning management system interface.

- iTV—Interactive Video only
- Learning management system
- Publisher course with learning management system interface.

Class Size: Good practice is that section size should be no greater in distance ed modes than in regular face-to-face versions of the course. Will the recommended section size be lower than in on-ground sections? If so, explain why.

The preferred maximum enrollment for iTV courses is 20 students at each site, 45 total.